

Methods of determining the transfer ... S/194/52/000/006/053/232
D295/D308

asured values at $n + m$ points of the characteristic are required, and then corrections to these coefficients are found by minimizing the square of the difference of the measured and the calculated characteristic. However, this method of determining corrections is very laborious. A more convenient method is to find them by minimizing the square of the difference of the measured and the calculated inverse characteristic. This method is only applicable to transfer functions that have no zeros. According to G.I. Monastyrshin's method (see RZhE, no. 21, 1960, 4 15555) the coefficients of a transfer function having both zeros and poles are determined by minimizing the square error. Ye.Ye. Dudnikov's method (Avtomatika i telemechanika, v. 20, no. 5, 1959, 576-582) is the only one that permits the determination of the coefficients of the transfer function without a preliminary investigation of its structure, which constitutes the great advantage of the method, since the structure transfer links is in most cases either altogether unknown or is known very approximately. 6 figures, 15 references. [Dresden working group for regulation and control engineering of the Deutsche Akademie der Wissenschaften zu Berlin, East Germany]. [Abstracter's note: Complete translation.]

Card 3/3

SENGALEVICH, A.P., inzhener.

Calculating ice formation in the metal pressure pipes of hydro-
electric power plants. Gidr. stroi. 26 no.4:40-43 Ap '57.
(Hydroelectric power plants) (MLRA 10:6)

SENGALEVICH, G.Mikh.

Pests of fruit trees. Priroda Bulg 12 no.2:69-76 Mr-Apr '63.

1. Vissh selsko-stopanski institut "V. Kolarov", Plovdiv.

DIRIMANOV, M., dots.; SENGALOVICH, G., st. assist.

Synanthedon tipuliformis Clerck, foe of currants, and
means for fighting it. Priroda Bulg 12 no. 4: 93-98
Jl-Ag '63.

1. Vissh selskostopanski institut "V. Kolarov", Plovdiv.

SENGALEVICH, Georgi M.

Chemical means for attraqting and repelling insects.
Priroda Bulg 12 no. 6:87-91 N-D '63.

1. The Vasil Kolarov Higher Agricultural Institute, Plovdiv.

CHENGSHAVICH, Georgii, et. al.

Use of granulated insecticides and insect fertilizers. Priroda
Bulg 23 no.3165-67 My-Je 64.

SENGALEVICH, Georgi Mikh.

Enemies of dry wood. Priroda Bulg 13 no.6:89-93 N-D '64.

1. Vasil Kolarov Higher Agricultural Institute, Plovdiv.

L 15810-66 EWT(m)/EMP(v)/ENP(j)/T/ETC(m)-6 WW/RM

ACC NR: AT5028951

SOURCE CODE: UR/2807/65/000/210/0037/0051

AUTHOR: Raudsepp, Kh. T.; Sengbush, Yu. I.

ORG: Tallinn Polytechnic Institute (Tallinskiy politekhnicheskiy institut) Bt1

TITLE: Study of the synthesis of adhesive resins based on higher phenol fractions of shale tars

SOURCE: Tallinn. Politekhnicheskiy institut. Trudy, Seriya A, no. 210, 1964. Sbornik statey po khimii i khimicheskoy tekhnologii (Collection of articles on chemistry and chemical engineering), no. 10, 37-51

TOPIC TAGS: resorcinol, phenol, shale oil, resin, adhesive, glue, bonding material, adhesive bonding

ABSTRACT: The feasibility of using resorcinol fraction (260°-380°C) for manufacturing adhesive resins and the effect of phenol content on the adhesive properties of resol-formaldehyde resins were studied. In the synthesis experiments, the molar ratio of phenols to formaldehyde varied from 1:0.3 to 1:1.1, the concentration of NaOH catalyst (based on resorcinol) varied from 8 to 20 mol %, the concentration of

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UDC: 668. 395. 6

L 15810-66

ACC NR: AT5028951

HCl was 0.02 mol %, the content of dry matter in shale tar varied from 42 to 56.5%, and ethyl alcohol content in the condensation blend was 9.1-26.7%. The condensation experiments were conducted at 35-65°C for 1-2.5 hours and the condensation products were tested for shear strength. Resin adhesion strength as a function of phenol content in the resorcinol fraction is shown in fig. 1. It was found that

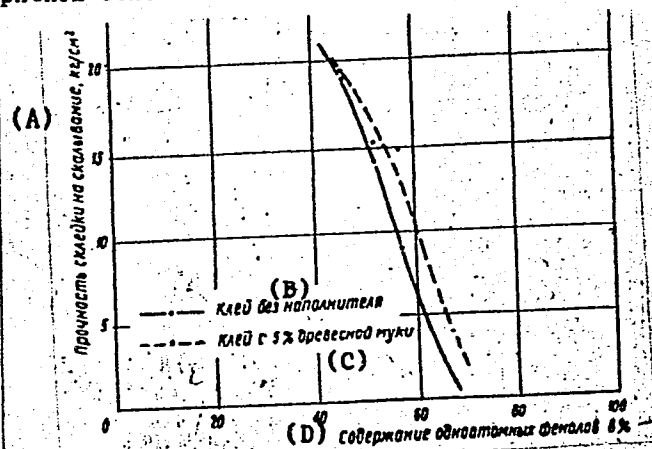


Fig. 1. A--shear strength of a joint, kg/cm²; B--adhesive resin without a filler; C--adhesive resin with 5% wood powder; D--content of phenol in %

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L 15810-66

ACC NR: AT5028951

good quality adhesive resins are obtained from resorcinol fractions containing 40-50% phenols. It was shown that the optimum conditions for the preparation of water soluble adhesive resins are: 0.4-0.5 to 1 molar ratio of formaldehyde to phenols, 0.1-0.12 to 1 molar ratio of NaOH catalyst to phenols, ethyl alcohol content of 10-15% based on adhesive resin, and a dry matter content in the adhesive resin of less than 45-50%. It was found that for maximum adhesive resin stability, the condensation process should be completed in 2-2.5 hours at 65°C. In order to obtain a glue, the molar ratio of formaldehyde to total phenols in the starting adhesive resin was found to be 0.8-1. Orig. art. has: 2 figures, 6 tables.

SUB CODE: 07/

SUBM DATE: 00/

ORIG REF: 008/

OTH REF: 004

Card 3/3 SYN

SENGELIJA, Mich., kandidat lekarskych ved.

A Czechoslovakian physician in Georgia. Ivan Antonovic PRIBYL
(1780-1866). Cesk.zdravot. 8 no.9:521-524 S'60.

1. Vedouci oddeleni dejin lekarstvi, lekarsky institut, Tbilisi.
(BIOGRAPHIES)

SENGER, Alfons; KROL, Jerzy; STRYZEWSKI, Hieronim

Application of apparatus to the lower extremities in Heine-Medin
disorder and its relation to paralytic syndromes, Chir, nacz,
medu ortop, polio 25 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

1. Z Kliniki Ortopedycznej Akademii Medycznej w Poznaniu.

Kierownik: prof. dr W. Dega.

(POLIOMYELITIS, therapy.

*orthopedic appar., relation to types of paralysis)

(ORTHOPEDICS, apparatus and instruments,

*ther. of paralysis in polio.)

SENGER, Alfons (Poznan, ul Maszynowa 16)

Application of orthopedics corsets in flaccid paralysis of the trunk. Chir. narz.ruchu ortop. polska 19 no.2:195-202 1954.

1. Z Kliniki Ortopedycznej Akademii Medycznej w Poznaniu. Kierownik: prof. dr W.Dega.

(POLIOMYELITIS, therapy,

*orthopedic corsets in flaccid paralysis)

(PARALYSIS,

*flaccid, in polio., ther., orthopedic corsets)

(ORTHOPEDICS, apparatus and instruments,

*corsets, ther. of flaccid paralysis in polio.)

SENGER, Alfons

Determination of the angle of anterior torsion of the femoral neck with the aid of tomography. Chir. narz. ruchu ortop. polska 19 no.3:273-277 1954.

1. Z Kliniki Ortopedycznej Akademii Medycznej w Poznaniu. Kierownik: prof. dr W.Dega.

(FEMUR, NECK,
anterior torsion, tomographic determ.)

SENGER, Alfons

Evaluation of compression arthrodesis. Chir. narz. ruchu 21 no.4:
329-348 1956.

1. Z Kliniki Ortopedycznej A.M. w Poznaniu. Kierownik: prof.
dr. W. Dega. Poznań, ul. Maszynowa 16 m. 2.

(JOINTS, surgery,
compression arthrodesis (Pol))

SENGER, Alfons

Surgical stabilization in fractures of the spine with the aid of metal endoprotheses. Chir. narz. ruchu 21 no.5:479-483 1956.

1. Z Kliniki Ortopedycznej A.M. w Poznaniu. Kierownik: prof. dr. W. Dega. Adres autora: Poznan, ul. Maszynowa 16 m. 2.

(SPINE, fractures,
surg., internal fixation with metal protheses (Pol))

SONGER, A. (Poznan)

60th Birth anniversary of Wiktor Dega. Chir. narz. ruchu 22 no.1:1-6
1957.

(BIOGRAPHIES,
Dega, Wiktor (Pol))

SENGER, Alfons; LUKASZEWSKI, Bogdan

Stress fracture of the femoral neck. Chir. narz. ruchu 22 no.1:
29-38 1957.

1. Z Kliniki Ortopedycznej A. M. w Poznaniu. Kierownik: prof dr W Dega.
Z Zakładu Anatomii Patologicznej w Poznaniu. Kierownik: prof. dr J.
Groniowski. Adres autorów: Poznań, ul. Maszynowa 16 m. 2.

(FEMUR NECK, fract.
stress fract. (Pol))

SENGER, A.; GRYBOS, J.; JESKE, Witold; PIECHOCKI, K.; POIAKOWSKI, I.; SWIDERSKI, G.

Significance of early stabilization of the spine in the treatment of spinal fractures with cord injuries. Chir. narz. ruchu 22 no.4:377-380 1957.

1. Z Kliniki Ortopedycznej A. M. w Poznaniu. Kierownik: prof. dr W. Dega
Poznan, ul. Dzierzynskiego 135/147

(SPINE, fractures

causing spinal cord inj., surg., early stabilization of spine (Pol))

(SPINAL CORD, wds. & inj.

caused by fract. of spine, surg., early stabilization of spine (Pol))

SENGER, Alfons

Dysfunctions of the hip joint in old age. Chir.narz.ruchu 24 no.5:
403-416 '59.

1. Z Kliniki Ortopedycznej A.M. w Gdansk. Kierownik: doc.dr
A. Senger.

(HIP dis.)

SENGER, Alfons , doc. dr.

Results of treatment of Perthes disease by McMurrays osteotomy.
Chir. narzad. ruchu ortop. Pol. 28 no.7:877-883 '63

1. Z Kliniki Ortopedycznej Akademii Medycznej w Gdansk (Kirow-
nik: doc. dr. A. Senger).

SENGER, A.

In memoriam Prof. Dimitrii Iazykov, M.D. Chir. narzad. ruchu
ortop. Pol. 29 no.3:309-310 '64.

SENGUPTA, P. (Indiya)

Behavior of light in a pulsating universe. *Astron. zhur.* 40
no.2:277-279 Mr-Apr '63. (MIRA 16:3)
(Cosmology) (Light)

SENT, A.

The problem of supports on beam joints with reinforced-concrete consoles.

2. 21 (REVISTA TRANSPORTURILOR) (Bucharest, Rumania) Vol. 4, no. 12, Dec. 1957

NO: Monthly Index of East European Accessions (IEEA) LC Vol. 7, No. 5, 1958

SENIC, Radomir

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Pharmaceuticals, Cosmetics, and
Perfumes

(3) 3

Determination of essential oils in coniferous-tree needles. Siniša Stanković and Radomir Senić. *Glasnik Šumarskog Fak., Univ. Beograd* No. 5, 271-81 (1952) (English summary).—The needles were boiled in water, and the mixt. was distd. The distillate was extd. with petr. ether, and the n of exts. was detd.. The n vs. vol. % plot gives a slightly upward convex curve which cannot be used as standard curve for oil detn. because of variation in chem. compn. of oils, which in its turn is dependent on the variety of trees as well as on ecological factors. Two parallel distns. are proposed, one for quant. detn. and the other for the detn. of n of pure oil of each particular pattern. The n of solvent (a), on pure oil (b), and of petr. ether ext. of oil (d) are related as $x = (d - a)/(b - a) \times 100$, where x gives the vol. percent of oil in petr. ether ext. The calcn. contains an error by assuming that the n values are in linear proportion to the concn. This was corrected by using concns. of less than 10 vol. %, where the curve is identical with the theoretical n -concn. relation. The errors were reduced to 0.002%, calcd. on the basis of wt. of needles. Therefore the whole formula is: $c = [(d - a)/(b - a) \times 100] - [(d - a)/(b - a) \times 111$.

V. Mihajlov

SENIĆ, R.

Chemical Abst.

Vol. 48

Apr. 10, 1954

Pharmaceuticals, Cosmetics, and Perfumes

(4)
Effect of storage on the quantitative changes in the essential oils, β -carotene, and chlorophyll content of *Pinus nigra* needles. S. C. Stanković, D. Karapandžić, and R. Senić (Univ. Belgrade). *Glasnik Šumarskog Fak., Univ. Beogradu* No. 6, 237-47(1953)(English summary).—In field storage of pine needles: H_2O , β -carotene (I), and chlorophyll (II) contents did not change while essential oil (III) content began to decrease after 55 days; in indoor storage: I, II, and III decreased when the H_2O content was reduced below a crit. value. Loss of III is due to resinification and evapn.
G. Meguerian

Senic, R.

✓ Quantitative changes of essential oil, carotene, and l-ascorbic acid in white pine (*Pinus silvestris*) and black pine (*Pinus nigra*) needles during the year. S. C. Stanković and R. Senić. *Glasnik Šumarskog Fak., Univ. Beogradu* No. 8, 231-312 (1954); cf. *C.A.* 48, 4184d. — Evaluation of pine needles from the two varieties from May, 1952, to October, 1953, showed that representative samples of white pine needles showed a range of 0.10 to 0.92 g. % essential oil, 63.1-182.0 mg. % l-ascorbic acid and 24.0-50.2 mg. % carotene (all calcd. on dry needles). The black pine needles contained 0.60-0.89 g. % essential oil, 20.0-83.6 mg. % l-ascorbic acid, and 23.3-36.7 mg. % carotene. Refractive indexes showed a change in quality as well as quantity of essential oil. Ascorbic acid content is higher in winter than summer. Young pine needles are poorer in carotene and ascorbic acid. Black pine young needles are poorer in essential oil also but the reverse is true for white pine.

V. N. Bednarski

Senić, Radomir

V Determination of oxygen in gaseous mixtures by means of the Henry Dalton law. Radomir Senić, Glasnik Šumarskog Fak., Univ. Beograd, No. 8, 313-18 (1954) (English summary). The gas phase contg. O is placed in contact with deoxygenated water, and the dissolved O detd. by the modified Winkler method (C.A. 5, 2518). The content in mg./l. is divided by Dalton's const. k for the given temp. to give the O content of the gas phase directly in %. The values of const. k for 0°, 10°, 20°, and 30° are 0.700, 0.541, 0.436, and 0.381, resp. Plotting logarithmic values of const. against temp. gives a nearly linear relation for interpolation. The method is not affected by normal atm. pressure variations. V. N. Bednarski

1
Chew
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SENICHENKO, S. Ye

ARONOV, Samuil Grigor'yevich; BAUTIN, Ivan Grigor'yevich; VOLKOVA, Zoya Andreyevna; VOLOSHIN, Arkhip Il'ich; VIROZUB, Yevgeniy Vladimirovich; GABAY, Lev Izrailevich, DIDENKO, Viktor Yefimovich; ZASEKYARA, Vasil'y Grigor'yevich; IVANOV, Pavel Aleksandrovich, KUSTOV, Boris Iosifovich [deceased]; KOTOV, Ivan Konstantinovich; KOTKIN, Aleksandr Matveevich; KOMANOVSKIY, Maksim Semenovich; LBYTES, Viktor Abramovich, MOROZ, Mikhail Yakovlevich; NIKOLAYEV, Dmitriy Dmitriyevich. OBUKHOV-SKIY Yakov Mironovich; RODSHEYN, Pavel Moiseyevich; SAPOZHNIKOV, Yakov Yudovich, SENICHENKO, Sergey Yefimovich; TOPORKOV, Vasiliy Yakovlevich; CHERMNYKH Mikhail Sergeyevich; CHERKASSKAYA, Esfir' Ionovna, SHVARTS, Semen Aronovich; SHERMAN, Mikhail Yakovlevich; SHVARTS, Grigoriy Aleksandrovich; LIBERMAN, S.S., redaktor izdatel'stva; ANDREYEV, S.P., tekhnicheskii redaktor

[Producing blast furnace coke of uniform quality; a collection of articles for the dissemination of advanced practices] Poluchenie domennogo koksa postoiannogo kachestva; sbornik statei po obmenu peredovym opytom. Khar'kov, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 300 p. (MLRA 9:8)
(Coke industry)

SENICHENKO, S. Ye.

68-8-3/23

AUTHOR: Miroshnichenko, A. M., Senichenko, S. Ye., and Sapozhnikov, Ya. Yu.

TITLE: Coking of Stamped Charges. (Koksovaniye trambovannykh shikht)

PERIODICAL: Koks i Khimiya, 1957, No.8, pp. 10-12 (USSR).

ABSTRACT: Results obtained in 1952-53 on coking stamped charges from experimental and works blends are given. Properties of coals and the composition of blends used are given in tables 1 and 2 respectively. Coking conditions and properties of coke produced are shown in table 3. It was found that stamped charging of blends containing low rank coals improves the quality of the coke produced. There are 3 tables and 2 references, both of which are Slavic.

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ASSOCIATION: UKhIN.

AVAILABLE: Library of Congress

ZASHKVARA, V.G.; SENICHENKO, S.Ye.; PAPUSHIN, L.L.

New method for preparing coking charges. Koks i khim. no.8:61-63
'61. (MIRA 15:1)

1. Ukrainskiy uglekhimicheskiy institut (for Zashkvara, Senichenko).
2. Yasinovskiy koksokhimicheskiy zavod (for Papushin).
(Coke)

ZASHKVARA, V.G.; SENICHENKO, S.Ye.

Most suitable system of crushing cleaned Donets coals. Koks i khim.
no.11:15-20 '60. (MIRA 13:11)

1. Ukrainskiy uglekhimicheskii institut.
(Coal preparation)

ZASHKVARA, V.G.; SENICHENKO, S.Ye.; CHERKASSKAYA, E.I.; SEMISALOVA, V.N.

Effect of the size of the grain and of the sieve composition of
coals on the coking process. Koks i khim. no.8:3-8 '62.

(MIRA 17:2)

1. Ukrainskiy uglekhimicheskiy institut.

MEDVEDEV, K.P.; KHUDOKORMOVA, N.P.; AKIMOVA, L.M.; SENICHENKO, S.Ye.;
KOTOVA, A.D.

Investigating the relation between the composition of the mineral
part of coals and their germanium content. Koks i khim. no.1:9-13 '63.
(MIRA 16:2)

(Coal--Analysis)

SENICHEV, N.U., inzhener.

Assembling steel and reinforced concrete elements for the
large sports arena of the Central Stadium in Moscow. Nov.
tekh.i pered.op.v stroi. 18 no.8:18-22 Ag. '56. (MLRA 9:10)

(Moscow--Stadiums) (Precast concrete construction)
(Steel, Structural)

STRELKOVA, K.; SENICHEVA, L.

Heat insulating qualities of wall panels constructed of vermiculite.
Zhil. stroi. no.7:7 '63. (MIRA 18:8)

SENICHKIN, G.V.; SENICHKIN, A.G.; KHAL'FAN, Yu.A., red.; GRIGOR'YEVA,
A.I., red.; ZIL'BER, R.B., tekhn. red.

[Engine in operation] Dvigatel' v puti. Moskva, Izd-vo
DOSAAF, 1963. 95 p. (MIRA 16:12)
(Motor vehicles--engines)

SENICHKIN, G.

25784

Tvorets Pervykh Sovetskikh Aviatsionnykh Motorov Vozdushnogo Okhlazhdeniya
(A.D. Shvetsov). Vestnik Vozdush. Flota, 1948, No. 7, s. 55-61

SO: LETOPIS NO. 30, 1948

SENICHKIN, G., COL

Fig. 173T11

USSR/Aeronautics - Power Plant, Operation Jan 50
Training

"Operation of Power Plants Under Winter Condi-
tions," Col G. Senichkin

"Vest Vozdush Flota" No 1, pp 40-44

Operations for prepg airplanes for winter cam-
paign. Inspection of heating devices and proper
construction and adjustment of winter coverings
for eng cowls necessary. Procedure for starting
eng at low temp to -25°C . Suggests measures
against freezing of battery-electrolyte.

173T11

SENICHKIN, G. and YEFIMOV, Ye.

"Technical Maintenance of Aircraft and Engines," Moscow, 1952

Summary translation D 312282, 12 Sep 55

SENICHKIN, G.

AID P - 2659

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 14/17

Author : Senichkin, G. Col. Eng.

Title : New textbook on the design and calculation of parts
of gas turbine engines

Periodical : Vest. vozd. flota, 9, 80-81, S 1955

Abstract : The author favorably reviews and comments on the book
Aviatsionnyye gazoturbinnyye dvigateley (Aircraft Gas
Turbine Engines) by Skubachevskiy, G. S., Oborongiz,
1955.

Institution : None

Submitted : No date

TYUTYUNOV, Vladimir Alekseyevich; SENICHKIN, G.V., inzhener, redaktor;
LOSEVA, G.P., izdatel'skiy redaktor; SECHERBAKOV, P.V., tekhnicheskiiy redaktor

[Testing turbojet airplane engines] Ispytaniia turboreaktivnykh
aviatsionnykh dvigatelei. Moskva, Gos. izd-vo obor. promyshl.,
1956. 138 p. (MLRA 10:1)
(Airplanes--Turbojet engines)

SENICHKIN, Grigoriy Vasil'yevich; DRUZHININSKIY, M.V., redaktor; KUZ'MIN,
~~I.F., tekhnicheskiiy redaktor~~

[Design and operation of the M-11FR motor] Konstruktsiia i ekspluata-
tsiia dvigatel'ia M-11FR. Moskva, Voen. izd-vo Ministerstva obor.SSSR,
1956. 254 p. (MIRA 10:1)
(Airplanes--Motors)

SEE HOW HAK MO, C.F.

86-11-20/31

AUTHOR: Senichkin, G. V., Reserve Engr Col

TITLE: Along Unknown Roads (Neizvedannymi putyami)

PERIODICAL: Vestnik Vozdushnogo Flota, 1957, Nr 11, pp. 75-77 (USSR)

ABSTRACT: Arkhip Mikhaylovich Lyul'ka is a prominent Soviet engineer. He was among the first Soviet scientists who created jet engines; his engine weighed 500 kg and developed a 600 kg thrust. In 1940, under his guidance the construction of the first experimental 600 kg turbo jet engine with axial compressors was started; it was stopped by World War II. In 1944, his 1,300-kg-thrust turbo jet engine, weighing 885 kg, passed Government tests. He completed a new, improved and much more powerful turbo jet engine in 1950; it was installed in some new aircraft. In 1951, he worked on a supersonic compressor intended for aircraft engines. The four turbo jet engines with which the Tu-110 passenger aircraft, developing 1,000 km/hr, has been equipped, are of his design. Professor Lyul'ka lectures at the Moskva Aeronautical Institute im. S. Ordzhonikidze. He trains young aeronautical researchers and designers, and plans to produce other first-class aircraft engines. A photo of Lyul'ka and four figures are reproduced. Two of the figures are graphs giving the values of the specific weight and specific fuel consumption of engines equipped with axial and centrifugal compressors, and are plotted against the 1940-1952 period.)

AVAILABLE: Library of Congress
Card 1/1

SINYAREV, Gennadiy Borisovich; DOBROVOL'SKIY, Mstislav Vladimirovich;
PANICHKIN, I.A., doktor tekhn.nauk, prof., retsenzent; SENICHKIN,
G.V., inzh., red.; PETROVA, I.A., red.; ZUDAKIN, I.M., tekhn.red.

[Liquid-fuel rocket engines; theory and design] Zhidkostnye
raketnye dvigateli; teoriya i proektirovanie. Izd.2-oe, perer.i
dop. Moskva, Gos.izd-vo obor.promyshl., 1957. 579 p. (MIRA 11:1)
(Rockets (Aeronautics))

SENICHKIN, G.V.; SENICHKIN, A.G.; KHAL'FAN, Yu.A., red.; GRIGOR'YEVA,
A.I., red.; ZIL'BER, R.B., tekhn. red.

[Engine in operation] Dvigatel' v puti. Moskva, Izd-vo
DOSAAF, 1963. 95 p. (MIRA 16:12)
(Motor vehicles--Engines)

SENICHKIN, M.; LIVSHITS, S.; FILATOV, P. (Moskva)

Device for evaluating the ignition glow. Radio no. 11:22-23
N '60. (MIRA 14:1)

(Automobiles—Ignition)

(Electronic apparatus and appliances)

BRUSYANTSEV, N.V., kandidat tekhnicheskikh nauk; KOLTYPIN, S.G.;
SEHICHKIN, M.A.

Method of determining the contents of admixtures in lubricating oils.
Standartizatsiia no.4:53-56 JI-Ag '54. (MLRA 8:2)
(Imbrication and lubricants--Standards)

SENICHKIN, M. A.

AID P - 341

Subject : USSR/Chemistry
Card : 1/1
Authors : Senichkin, M. A. and Vinogradov, V. K.
Title : Evaluation of filtration of additives from motor oils
Periodical : Neft. Khoz., v. 32, #5, 67-70, My 1954
Abstract : The concentration of the additives in motor oils was studied by the authors by means of periodical filtration. The concentration ~~is~~ found to vary with the filtrating material and the type of additives. The operating characteristics of the motor oil and the effect of the filtrating material and type of additives must be determined experimentally. 2 charts, a diagram and a table.
Institution : None
Submitted : No date

KLIMOV, K.; VINOGRADOV, V.; SENICHKIN, M.; FOMINA, A.; VILENKIN, A.

New oils for automobile transmission units. Avt.transp. 33 no.11:
17-19 N '55. (MLRA 9:3)

(Automobiles--Lubrication)

GUREYEV, A.A.; SENICHKIN, M.A.; FILATOV, P.G.

Effect of the fractional composition of automobile gasolines on the
starting up of a cold engine. Khim.i tekhn.topl.i masel 6 no.6:51-54
Je '61. (MIRA 14:7)

(Gasoline)

S/081/62/000/004/070/087
B138/B110

11 9000
AUTHORS:

Dem'yanov, L. A., Semenidov, Ye. G., Vorob'yev, P. I.,
Shchegolev, N. V., Senichkin, M. A., Sharapov, V. I.

TITLE:

Tracer method of investigating the wear-resistance
properties of sulfurous oils

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 4, 1962, 483, abstract
4M184 (Sb. "Khimiya seraorgan. soyedineniy,
soderzhashchikhsya v neftyakh i nefteproduktakh. v. 4",
M., Gostoptekhizdat, 1961, 206-211)

TEXT: The anti-wear properties of thickened sulfurous oils from the
Novo-Ufimka NPZ and Baku oils have been investigated. The test bench
consisted of a 3M-123F (ZIL-123F) engine with full instrumentation and
radiometric apparatus for the determination of the radioactivity of the
oil. The greater part of both oils contained multi-functional additives
for the improvement of their operational qualities. The wear resistance
of the oils was assessed from the slope of the wear line to the X-axis
($\tan \alpha$), while a comparative assessment was made from the "relative
Card 1/2

SHCHERBIN, N.S., ind. spec. rel.; GUBENKO, V.I., ind.; VAKHONOV, P.S., ind.

Stand tests of oil. Eksp. -tekh. svais. i prim. avt. top. smaz.
mat. i spetschid. no.3:56-65 '63.

(MIRA 17:10)

SENICHEN, N.A., kand. tekhn. nauk; PILET, P.G., inzh.; VILENKIN, I.I.,
kand. tekhn. nauk

Selecting the viscosity of transmission oils depending on operating
conditions. Eksp.-tekhn. svyaz. i prim. avt. top. smaz. mas. i spets-
zits. no.3:84-90 162. (MFA 17:10)

SENICHKIN, M.A., kand. tekhn. nauk; FILATOV, P.G., inzh.

Possibility of the use of the same fluid in the hydraulic drive
of the brake system and in shock absorbers of motor vehicles.
Eksplo.-tekhn. svcis. i prim. avt. top. smaz. mat. i spetsizid.
no.3:100-105 '63. (MIRA 17:10)

1-2009-66 PATENT NAME
ACC NR: AP6011222 (A) SOURCE CODE: UR/0413/66/000/006/0057/0057

INVENTOR: Gureyev, A. A.; Sobolev, Ye. P.; Shchegolev, N. V.; Alekseyev, A. I.;
Kornitskiy, V. V.; Minkin, M. L.; Senichkin, M. A.; Livshits, S.M.; Englin, B.A.;
Mikhlin, Yu.V.

ORG: none

TITLE: Starter fluid for engines with carburetors. Class 23, No. 179870

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 57

TOPIC TAGS: carburetor engine, starter fluid, engine starter fluid, antioxidant additive, antiwear additive

ABSTRACT: An Author Certificate has been issued describing a starter fluid for engines with carburetors. The fluid has a base of sulfuric ether and a mixture of low-boiling hydrocarbons with an antioxidant additive. It is suggested that to improve the functioning properties of the fluid, isopropyl nitrate or oxidation products of hydrocarbons plus an antiwear compound be added. [Translation] [NT]

SUB CODE: 21/ SUBM DATE: 13Nov64/

Card 1/1 UDC: 661.17:621.434.019-632

SHAPIRSHTEYN, Ya.A.; SENICHKINA, L.G.

Semiconductor relay. Avtom. i prib. no. 1:67-68 Ja-Mr '64.
(MIRA 17:5)

BERG, S.L., polkovnik; VOROB'YEV, V.I., kapitan pervogo ranga; GIL'EO, G.M., kapitan pervogo ranga; ANANCHENKO, A.A.; BALAKSHINA, M.M.; BANNIKOV, B.S., kapitan vtorogo ranga; BAKHTINA, G.F.; BERENSHAM, N.V.; BUTYRINA, N.Ya.; VOROB'YEV, V.I., kapitan pervogo ranga; GASS, I.P.; GINBYSH, N.S.; GLADIN, D.F., polkovnik; GOLOVANOV, L.G., kand. ist. nauk; GOLUBEVA, Z.D., kand. filol. nauk; GONCHAROVA, A.I.; ZAMADVOROVA, R.N.; IVANOVA, N.G.; KARAMZIN, G.B.; KOVAL'CHUK, A.S.; KRONIDOVA, V.A.; LITOVA, Ye.I.; MOLCHANOVA, T.I.; OKUN', L.S.; POCHEBUT, A.N.; RAYTSES, V.I.; SAVINOVA, G.N.; SENICHKINA, T.I.; SKRYNNIKOV, R.G., kand. ist. nauk; FURAYEVA, I.I.; CHIZHOVA, N.N.; YASINSKAYA, L.F.; GLADIN, D.F., polkovnik; LABETSKIY, Ye.F., podpolkovnik; LEBEDEV, S.M., kapitan pervogo ranga; ORDYNSKIY, N.I., kapitan pervogo ranga; NADVODSKIY, V.Ye., podpolkovnik; DEMIN, L.A., inzh.-kontr-admiral, glav. red.; FRUNKIN, N.S., polkovnik, zam. otv. red.; LEVCHENKO, G.I., admiral, red.; BAKHTINA, G.F., tekhn. red.

[Naval atlas] Morskoi atlas. n.p. Izd. Glavnogo Shtaba Voenno-Morskogo Flota. Vol.3. [Naval history] Voenno-istoricheskii. Pt.1. [Text for the maps] Opisaniia k kartam. 1959. xxii, 1942 p. (MIRA 15:5)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. (Naval history)

SENIK, G.A., Cand Vet Sci--(diss) "Pat^homorphologic^h changes in
coccidiosis of chicks. ("ith certain ^{consideration} calculation of the biologi-
cal interrelations of parasite and host). " Mos, 1958. 18 pp
(Izd Agr USSR. Mos Vet Acad), 140 copies (IL, 25-58, 117)

SENIK, G.F. [Senyk, H.F.]

New form of mole of the Ukrainian Carpathians. Dop. AN URSR no.5:
674-676 '65. (MIRA 18:5)

1. L'vovskiy gosudarstvennyy nauchno-prirodovedcheskiy muzey
Ministerstva kul'tury UkrSSR.

SENIK, Kiril Aleksandrovich; MATVEYEV, M.A., red.; MUKHIN, S.S.,
red.izd-va; GUROVA, O.A., tekhn.red.

[Mine exploration machinery] Gorno-razvedochnaia mekhanika.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane
nedr, 1960. 315 p. (MIRA 13:9)
(Mining machinery) (Electricity in mining)

KOYNOV, M.M.; GERENCHUK, K.I. [Herenchuk, K.I.], prof., otv.red.;
KOMKOV, G.G. [Komkov, H.H.], red.; SENK, L.T., red.;
MALYAVKO, A.V., tekhred.

[Nature of Stanislav Province] Pryroda Stanislavs'koi oblasti.
L'viv, Vyd-vo L'vivs'koho univ., 1960. 101 p.

(MIRA 13:8)

1. Kafedra fizicheskoy geografii L'vovskogo gosudarstvennogo
universiteta im. Ivana Franka (for Gerenchuk).
(Stanislav Province--Physical geography)

GOLOVKO, P.I. [Holovko, P.I.], dots., red.; KUBLANOV, B.G. [Kublanov, B.H.], doktor fil. nauk, red.; PETROSKIY, M.I. [Petrova's'kyi, M.I.], dots., otv. red.; SENIK, L.T. [Senyk, L.T.], red.; SARANYUK, T.V., tekhn. red.

[Social and economic sciences; collected works of the graduate students of the departments of social sciences] Sotsial'no-ekonomichni nauki; zbirnyk robot aspirantiv kafedr suspil'nykh nauk. L'viv, 1961. 244 p. (MIRA 15:11)

(Agriculture—Economic aspects) (Communism)

SENIK, M.S.

Bilateral pyonephrosis in a 6-months-old child. *Pediatrica*
42 no.1:64 Ja'63. (MIRA 16:10)

1. Iz kafedry pediatrii (zav. - prof. S.I. Ignatov) L'vov-
skogo meditsinskogo instituta (dir. - prof. L.N. Kuzmenko)
(KIDNEYS—DISEASES) (INFANTS—DISEASES)

SENIX, N.I.

Secret of success. Nauka i zhizn' 23 no.9:25-27 '56. (MLRA 9:10)

1.Veditel' sveklokomбайна Benevskoy mashine-trakternoy stantsii,
Zelechevskogo rayona, L'vovskoy oblasti.
(Lvov Province--Sugar beets--Harvesting)

SENIK, P.M.

Generalization of an inverse problem of H.H. Bogoliubov's
asymptotic method. Izv. vys. ucheb. zav. mat. no. 6:226-
232 '60. (MIRA 14:1)

1. L'vovskiy politekhnicheskii institut.
(Oscillations)

SENIK, P.M.

A symptotic integration of nonlinear autonomic systems with
many degrees of freedom in the region of integral resonance.

Ukr. mat. zhur. 12:349-354 '60.

(MIRA 13:11)

(Differential equations)

SENIE, P.M. [Senyk, P.M.] (L'vov)

Determining the function characterizing energy dispersion of a
vibrating system. Prykl.mekh. 6 no.1:40-45 '60. (MIRA 13:6)

1. L'vovskiy politekhnicheskij institut.
(Vibration)

SENIK, P. M., Cand Phys-Math Sci -- "Solution of a straight-line problem of dynamics in the theory of non-linear oscillations by means of the asymptotic method." Kiev, 1961. (Joint Acad Council of Insts of Math, Phys, and Metallophys, Acad Sci UkSSR) (KL, 8-61, 228)

- 44 -

MITROPOL'SKIY, Yu.A. [Mytropol's'kyi, IU.O.], akademik; SENİK, P.M.
[Senyk, P.M.]

Developing the asymptotic solution for an autonomous system with
a high degree of nonlinearity. Dop.AN URSR no.7:839-844 '61.
(MIRA 14:8)

1. Institut matematiki AN USSR i L'vovskiy politekhnicheskii
institut. 2. AN USSR (for Mitropol'skiy).
(Differential equations)

24 4200
10 6300

25107
S/198/61/007/003/002/013
D264/D303

AUTHOR: Senyk, P.M. (L'vyv)

TITLE: On determining the function of energy distribution in an oscillatory system with many degrees of freedom

PERIODICAL: Prykladna mekhanika, v. 7, no. 3, 1961, 253 - 257

TEXT: The author considers an oscillatory system with N degrees of freedom, characterized by equations of the form

$$T = \frac{1}{2} \sum_{s,r=1}^N b_{sr} \dot{g}_s \dot{g}_r; \quad V = \frac{1}{2} \sum_{s,r=1}^N c_{sr} g_s g_r; \quad (1.1)+(1.2) \quad \times$$

$$Q_s = \epsilon f_s(g_1, \dots, g_N, \dot{g}_1, \dots, \dot{g}_N, \epsilon), \quad (1.3)$$

where T is the kinetic energy, V is the potential energy, and Q_s

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On determining the ...

is the generalized force characterizing the energy distribution, g_s , g_r and $\dot{g}_s$, $\dot{g}_r$ are generalized coordinates and velocities, b_{sr} , c_{sr} are constant symmetric coefficients, and ϵ is a small parameter. Q_s is to be expressed as an analytic function by making use of the graph of damping oscillations written in planes (g_s, t) (t = time).

Insofar as the asymptotic method of small parameters gives a good result in the first approximation, a generalized force in the first linearized approximation may be sought. The characteristic equations of the undisturbed state ($\epsilon = 0$) are taken to have N pairs of non-zero solutions $\pm i\omega_1$. In the first approximation, the solution of a system of N non-linear second-order differential equations is given in the form

$$g_s = \sum_{l=1}^N \varphi_{sl} a_l \cos \psi_l, \quad (1.5)$$

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On determining the ...

$$\ddot{x}_v + \omega_v^2 x_v = \varepsilon [\bar{F}_v(a_v) \dot{x}_v + \bar{\bar{F}}_v(a_v) x_v] \quad (1.15)$$

is obtained, where $\dot{x}_v$ and $\ddot{x}_v$ are the normal velocity and acceleration. In the first approximation, this has solution $x_v = a_v \cos \psi_v$, where a_v, ψ_v are functions of time. Evaluation of $\bar{F}_v(a_v)$, and $\bar{\bar{F}}_v(a_v)$ gives

$$\bar{F}_v(a_v) = \frac{2P_v(a_v)}{a_v}; \quad \bar{\bar{F}}_v(a_v) = -2\omega_v R_v(a_v). \quad (1.17)$$

The problem is then solved if P_v and R_v are known. It is observed that the graph in the (g_s, t) plane will approximate to the behavior of the ε function. The first approximation gives $g_s = A_s \cos \psi_s$ (2.1), where A_s is the amplitude and ψ_s is the phase of the oscillations. By equating (1.5) and (2.1) the relationship is found bet-

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S/198/61/007/003/002/013
D264/D303

On determining the ...

ween the generalized and normal coordinates and between the periodic times, where the frequencies in the two sets of coordinates are

$$\frac{d\psi_v}{dt} = \frac{2\pi}{T_v}; \quad \frac{d\psi_v}{dt} = \frac{2\pi}{\tau_v}.$$

$$a_v^{(n)} = \frac{1}{m} \sum_{s,j=1}^N b_{sj} \varphi_{rv} A_s^{(n)}. \quad (2.5) \quad \text{and}$$

$$\tau_v^{(n)} = \frac{\sum_{s=1}^N \varphi_{rv}}{\sum_{s=1}^N \varphi_{rv} \frac{1}{T_s^{(n)}}}. \quad (2.6)$$

follow and by finding $A_s^{(n)}$ and $T_s^{(n)}$ from the graph, $a^{(n)}$ and $\tau^{(n)}$ may be evaluated. A similar approach to that set in P.M. Senyk (Ref. 2: Vyznachennya funktsiyi, yaka kharakteryzuje enerhiyi kolyvnoyi systemy (The Evaluation of the Function Characterizing the Energy

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S/198/61/007/003/002/013

D264/D303

On determining the ...

Distribution of an Oscillatory System) Prykladna Mekhanika, v. 6, no. 1, 1960) is employed. There are two Soviet-bloc references.

ASSOCIATION: L'vivs'kyy politekhnichnyy instytut (Polytechnic Institute of L'viv)

SUBMITTED: February 21, 1959

Card 6/6

SENİK, P.M. [Senyk, P.M.]

Application of the u-method to a nonautonomous system with strong
nonlinearity. Dop. AN URSR no.9:1146-1149 '62. (MIRA 18:4)

1. L'vovskiy politekhnicheskij institut.

33864

S/041/62/014/001/005/007
B112/B104

16.3400

AUTHOR: Senik, P. M. (L'vov)
TITLE: Non-autonomous quasi-linear system with many degrees of freedom in the range of general resonance
PERIODICAL: Ukrainskiy matematicheskiy zhurnal, v. 14, no. 1, 1962, 92 - 96

TEXT: The author considers a system

$$\frac{dx_s}{dt} - \sum_{n=1}^N a_{rs} x_r = \sum_{n=1}^M f_{sn}(x_1, \dots, x_N, p_1 t, \dots, p_{N_1} t), \quad (1)$$

where

$$f_{sn} = \sum_{n_{s1}, \dots, n_{sN_1}=-\infty}^{\infty} f_{n_{s1}, \dots, n_{sN_1}}^{(n)}(x_1, \dots, x_N) e^{i \sum_{j=1}^{N_1} n_{sj} p_j t}. \quad (2)$$

It is assumed that the roots $\pm \omega_1$ ($1 = 1, \dots, N_2$) of the characteristic

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B112/B104

Non-autonomous quasi-linear...

equation fulfil the relations

$$\omega_1 = \sum_{j=1}^N k_{1j} \omega_j \quad (1 = 1, \dots, N_2),$$

where k_{1j} are integers. The solutions of (1) are represented in the form

$$x_s = \sum_{l=1}^{N_s} a_l [\varphi_{sl} e^{i(\theta_l t + \psi_l)} + \varphi_{sl}^* e^{-i(\theta_l t + \psi_l)}] + \sum_{n=1}^M e^{i u_{sn}} (a_1, \dots, a_{N_s}, \psi_1, \dots, \psi_{N_s}, \theta_1, \dots, \theta_{N_s}), \quad (5)$$

where u_{sn} are periodic functions of the angles ψ_e and $\theta_e = \omega_e t$ with the period 2π , and the functions a_1 and ψ_1 are solutions of the differential equations

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S/041/62/014/001/005/007
B112/B104

Non-autonomous quasi-linear...

$$\begin{aligned}\frac{da_l}{dt} &= \sum_{n=1}^M e^n A_n^{(l)}(a_1, \dots, a_{N_l}, \psi_1, \dots, \psi_{N_l}), \\ \frac{d\psi_l}{dt} &= \sum_{n=1}^M e^n B_n^{(l)}(a_1, \dots, a_{N_l}, \psi_1, \dots, \psi_{N_l}),\end{aligned}\tag{6}$$

and where the constants φ_{sl} , φ_{sl}^* are solutions of the algebraic equations

$$\begin{aligned}\omega_l \varphi_{sl} + i \sum_{r=1}^N a_{s,r} \varphi_{rl}^* &= 0, \\ \omega_l \varphi_{sl}^* - i \sum_{r=1}^N a_{s,r} \varphi_{rl} &= 0,\end{aligned}\tag{7}$$

The functions $A_n^{(v)}$ and $B_n^{(v)}$ are given by the formulas

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Non-autonomous quasi-linear...

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S/041/62/014/001/005/007
B112/B104

$$A_n^{(v)} = \frac{1}{2} \sum_{\bar{k}_{v1}, \dots, \bar{k}_{vN'} = -\infty}^{\infty} \left\{ \frac{1}{\eta} f_{\bar{k}_{v1}, \dots, \bar{k}_{vN'}}^{(n)} e^{i \left[\sum_{l=1}^{N_s} \bar{k}_{vl} \psi_l - \psi_v \right]} + \right. \\ \left. + \frac{1}{\eta^*} f_{\bar{k}_{v1}, \dots, \bar{k}_{vN'}}^{(n)*} e^{-i \left[\sum_{l=1}^{N_s} \bar{k}_{vl} \psi_l - \psi_v \right]} \right\}, \quad (18)$$

$$B_n^{(v)} = \frac{-i}{2a_v} \sum_{\bar{k}_{v1}, \dots, \bar{k}_{vN'} = -\infty}^{\infty} \left\{ \frac{1}{\eta} f_{\bar{k}_{v1}, \dots, \bar{k}_{vN'}}^{(n)} e^{i \left[\sum_{l=1}^{N_s} \bar{k}_{vl} \psi_l - \psi_v \right]} - \right. \\ \left. - \frac{1}{\eta^*} f_{\bar{k}_{v1}, \dots, \bar{k}_{vN'}}^{(n)*} e^{-i \left[\sum_{l=1}^{N_s} \bar{k}_{vl} \psi_l - \psi_v \right]} \right\}.$$

Card 4/5

SEMIK, P.M. (Lvov)

"Controlled oscillatory processes in quasi-linear systems"

Report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 64.

L 17825-65 EWT(d) Pg-4 AFWL/ASD(a)-5/AFETR/ESD(dp)/IJP(c)

ACCESSION NR: AP4047794

S/0021/64/000/010/1287/1289

AUTHOR: ~~Senik, P. M.~~ (Senik, P. M.)

TITLE: Controlling oscillatory processes in quasilinear systems with one degree of freedom

SOURCE: AN UkrRSR. Dopovidi, no. 10, 1964, 1287-1289

TOPIC TAGS: control theory, oscillatory process, differential equation, quasilinear system

ABSTRACT: The present paper is concerned with the control of a quasilinear system with one degree of freedom, which oscillates according to the function $u(\tau)$, so that the state of the system is described by the system of differential equations

$$\dot{x} + y = \bar{e}X(x, y, u), \quad \dot{y} - x = eY(x, y, u) \quad (1)$$

in the time interval $t_0 \leq t \leq t_1 < \infty$, with given amplitude and frequency

$$a = \gamma(\tau), \quad \Omega = 1 + \epsilon\lambda(\tau). \quad (2)$$

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L 17825-65

ACCESSION NR: AP4047794

It is assumed that the oscillatory function depends on the small parameter ε according to the expansion

$$u(\tau) = \sum_{n=0}^{\infty} \varepsilon^n u_n(\tau). \quad (3)$$

The author then proceeds to derive a control algorithm for a system having these properties. Orig. art. has: 15 formulas.

ASSOCIATION: Instytut matematyki* AN URSR (Mathematics Institute, AN Ukr SSR)

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: MA, DP

NO REF SOV: 002

OTHER: 001

Card 2/2

ACCESSION, NR: APL026837

S/0041/64/016/002/0268/0273

AUTHOR: Senik, P. M.

TITLE: Preset quasilinear oscillation processes

SOURCE: Ukrainskiy matematicheskiy zhurnal, v. 16, no. 2, 1964, 268-273

TOPIC TAGS: oscillation process, quasilinear oscillation, controlling parameter, instantaneous amplitude, instantaneous frequency, preset process, small parameter

ABSTRACT: The author solves the problem of choosing a system of controlling parameters guaranteeing oscillations of instantaneous amplitude and frequency of an object with given magnitude. The problem is to find controlling parameters b_r ($r = 1, \dots, m$) such that the oscillation process of an object described by the system of differential equations

$$\dot{y} + \omega x = \sum_{r=1}^m F_r(x, y) b_r,$$

$$\dot{x} - \omega y = 0, \quad (1)$$

in the time interval $t_0 \leq t \leq t_N > \infty$ behaves with given instantaneous amplitude

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ACCESSION NR: AP4026837

and frequency

$$a = \gamma(\tau), \quad \Omega = \omega + \varepsilon \lambda(\tau), \quad (2)$$

and the integral

$$I = \int_0^N ([x - au]^2 + [y - av]^2) d\tau \quad (3)$$

takes on a small value. Orig. art. has: 26 formulas.

ASSOCIATION: none

SUBMITTED: 16Jan63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: MM

NO REF SOV: 002

OTHER: 000

Card 2/2

SENİK, P.M. (L'vov)

Function of energy dissipation for materials with a nonlinear
law of elasticity. Prikl. mekh. 1 no.2:99-103 '65.
(MIRA 18:6)

1. Institut matematiki AN UkrSSR.

1. 117-67 EST(d)/EMP(v)/EMP(k)/EMP(h)/EMP(l) GD
ACC NO: AT0020830 (N) SOURCE CODE: UR/0000/66/000/000/0133/0154

AUTHOR: Senik, P. M.

ORG: none

TITLE: Controlled oscillatory processes in nonlinear autonomous systems

SOURCE: AN UkrSSR. Institut matematiki. Matematicheskaya fizika (Mathematical physics). Kiev, Naukova dumka, 1966, 133-154

TOPIC TAGS: partial differential equation, nonlinear oscillation, optimal control

ABSTRACT: For the system

$$\begin{aligned} \dot{x}_s + f_s(\varphi_1, \dots, \varphi_N, u_1^*, \dots, u_m^*) \frac{\partial \varphi_s}{\partial y_s} &= \epsilon F_s(x_1, \dots, x_N, y_1, \dots, y_N, u_1^*, \dots, u_m^*), \\ \dot{y}_s - f_s(\varphi_1, \dots, \varphi_N, u_1^*, \dots, u_m^*) \frac{\partial \varphi_s}{\partial x_s} &= \epsilon G_s(x_1, \dots, x_N, y_1, \dots, y_N, u_1^*, \dots, u_m^*) \end{aligned} \quad (1.1)$$

(s=1, ..., N),

it is required to find controls u_r^* ($r = 1, \dots, m$) such that the amplitude of phase coordinates x_s ($s = 1, \dots, N$) in the interval $[t_0, t_1]$ will change according to the rule

Card 1/2

SENIK, S. Ya.,

"Factors Securing Adequate Mineral and Vitamin Nutrition of Kholomogory Heifers in Various Feeding Procedures." (Dissertation for Degree of Candidate for Agricultural Sciences) Moscow Veterinary Academy of the Min Higher Education USSR, Moscow, 1955

SO: M-1036 28 Mar 56

Country : USSR
Category : Farm Animals, General Problems. Q-1
Abs. Jour : Izv. Vses. Zhivotn.-Biol., No 14, 1956, 73978
Author : Senik, S. Ya.
Institut. :
Title : Special Silage for Calves, Pigs, and Poultry.
Orig. Pub. : Izvestiya i zhivotnovodstvo Mold vii, 1957,
No 6, 27-28
Abstract : No abstract.

Card: 1/1

L 3247144 EWT(1)

ACC NR: AR6017226

SOURCE CODE: UR/0058/65/000/012/B011/B011

AUTHOR: Vlasenko, N. V.; Senik, V. I.

TITLE: The potential on the axis of a conducting disk with a concentric hole, taking the edge effect into account

SOURCE: Ref. zh. Fizika, Abs. 12B126

REF SOURCE: Tr. po teorii polya, vyp. 1, 1964, 59-63

TOPIC TAGS: conducting disk, edge effect, electric potential

ABSTRACT: The problem under consideration is the ²potential on the axis of a conducting disk with a concentric hole in consideration of the edge effect. [Based on authors' abstract] [AM]

SUB CODE: 20/ SUBM DATE: none

Card 1/1

SENILOV, A.A.

Protecting tree tapping tools from corrosion. Gidroliz.i
lesokhim.prom. 13 no.6:22-23 '60. (MIRA 13:9)

1. Beloyarskiy zavod podsochnykh instrumentov.
(Tree tapping--Equipment and supplies)
(Corrosion and anticorrosives)

ZYKOV, A.; SENILOV, B.

Ways of building bank systems in the Asian people's democracies.
Den.i kred. 19 no.10:51-62 0 '61. (MIRA 14:10)
(Communist countries, Asian--Banks and banking)

BRUSKIN, D.E., dotsent. Prinimali uchastiye: SENILOV, G.N., dotsent;
BASOVA, B.K., dotsent; BOKSHITSKIY, L.V., prepodavatel'; LUGOVOY,
G.P., prepodavatel'; CHUMAKOV, N.M., prepodavatel'. SENKEVICH,
A.M., dotsent, red.; CHAROV, A.D., tekhn.red.

[Electric equipment of airplanes] Elektrooborudovanie samoletov.
Moskva, Gos.energ.izd-vo, 1948. 464 p. (MIRA 12:6)

1. Kafedra inzhenerno-aviatsionnoy sluzhby Moskovskogo ordena
Lenina energeticheskogo instituta im. V.M.Molotova (for all
except Senkevich, Charov).

(Airplanes--Electric equipment)

USSR/Electricity - Magnetos

May 51

"Armature Reactance in the Magneto," Docent
G. N. Senilov, Cand Tech Sci, Moscow

"Elektrichestvo" No 5, pp 34-41

Suggests method, based on elec analogy, for
calcg the magnetic circuit of the magneto from
the armature reactance. Submitted 6 Jul 51.

189T23

SENILOV, G.N., kand.tekhn.nauk.

Use of pulsating lights to illuminate the New Year's tree in the
Kremlin. Svetotekhnika 6 no.9:18-21 S '60. (MIRA 13:9)

1. Moskovskiy energeticheskiy institut.
(Electric discharge lighting)
(Lighting, Architectural and decorative)

SENILOV, G.N., kand.tekhn.nauk

Mechanical work and energy of the armature reactance of a
magneto. Elektrichestvo no.10:52-55 0 '60. (MIRA 14:9)

1. Moskovskiy energeticheskiy institut.
(Electric generators)

GERASIMOV, I.P., akademik, red.; SHCHERBAKOV, D.I., akademik, red.;
L'VOVICH, M.I., prof., red.; SEMILOVA, M.N., red.; YEGOROVA,
N.F., tekhn. red.

[Problems in the economic utilization of the Volga-Akhtuba
Flood Plain and the Volga Delta] Problemy khoziaistvennogo
osvoeniia Volgo-Akhtubinskoi poimy i del'ty Volgi. Moskva,
Izd-vo Akad. nauk SSSR, 1962. 146 p. (MIRA 15:10)

1. Akademiya nauk SSSR. Institut geografii.
(Volga-Akhtuba Flood Plain--Reclamation of land)
(Volga Delta--Reclamation of land)

SENIN, A.G.

Transformation of the correlation functions and fields by systems
with distributed parameters. Izv. SO AN SSSR no.10:117-121 '63.
(MIRA 17:11)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN
SSSR, Novosibirsk.